

HCT



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

|                 |             |                      |                     |                  |
|-----------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/762,652      | 04/27/2001  | Andrew Dodd          | 6114                | 8516             |

7590 09/30/2002  
Arlene J Powers  
Samuels Gauthier & Stevens  
225 Franklin Street Suite 3300  
Boston, MA 02110

|          |
|----------|
| EXAMINER |
|----------|

ROSE, ROBERT A

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3723

DATE MAILED: 09/30/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/762,652

Applicant(s)  
Dodd et al

Examiner  
Robert Rose

Art Unit  
3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3-20-01, 4-27-01
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 11-16 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 3723

### DETAILED ACTION

1. Receipt is acknowledged of Applicant's Preliminary Amendment, filed April 27, 2001.
2. Receipt is acknowledged of Applicant's Prior Art Statement, filed March 20, 2001.
3. Receipt is acknowledged of Applicant's Foreign Priority Papers, filed May 14, 2001.
4. Claims 5-9 have been canceled.
5. Claims 1-4, and 11-16 are presented for examination.
6. Claims 1-4, and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1-4, line 1 Applicant should recite the claim in terms of a method or process if that is what is intended. In claim 1, line 5 the use of the alternative expression "and/or" is deemed to render the scope of the claims indefinite. In claim 12, line 2 it is unclear whether the recited expression "is improved from 0.13um to around 0.07 um" is intended to recite a range of improvement for the final product after treatment, or whether the "0.13um" is intended to refer to the surface roughness prior to treatment. Further, in claim 12 it is not clear what parameter is being measured.
7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 3723

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 11-12, and 15-16 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Hashimoto. Hashimoto discloses a method of producing a surface finish on bearing surfaces within the recited range by immersion grinding. Processing time is dependent upon the particular workpiece but is given as 45 minutes for one example(column 6, lines 30-34).

9. Claims 1-2, 4, 11, and 14-16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wood(British no. 227277). Wood discloses an immersion grinding process for finishing bearing surfaces comprising all of the subject matter set forth in applicant's claims above.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Hashimoto or Wood. The compressive strength increase would have been an expected result of performing the method of either Hashimoto or Wood. The design range of compressive strength imparted to the bearing surface would have been an obvious matter of design choice depending upon the conditions under which the bearing is to be used.

Art Unit: 3723

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto or Wood in view of Ohno. Ohno disclose a conventional apparatus for finishing workpieces comprising a rotary abrasive media receptacle and a rotary holder for preventing workpieces from contacting each other during immersion machining. To finish the bearing surfaces in a conventional rotary immersion receptacle with rotation of the workpieces within the media, to prevent contact between workpieces would have been obvious in view of Ohno.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akamatsu et al is cited of interest to show a roller bearing surface having an isotopic surface roughness achieved by barrel finishing.

14. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

rr

September 23, 2002.

ROBERT A. ROSE  
PRIMARY EXAMINER  
ART UNIT 323

